REMARKS

Claims 1-31 are pending in the application. Claims 5-13 and 17-30 have been withdrawn from consideration pursuant to the Examiner's constructive election in the outstanding office action. Applicants hereby acknowledge this election with traverse. By this response, claim 31 is new. Reconsideration and allowance are respectfully requested.

Claims 1, 2-4 and 14-16 have been rejected under 35 U.S.C. §103(a) over Fan et al., "Copper Wafer Bonding", *Electrochemical and Solid State Letters*, 2(10), pp. 534-536, 1999. Applicant traverses this rejection and respectfully asserts that Fan fails to disclose all of the claimed limitations.

Specifically, claim 1 recites,

> A method of fabricating an electro-*optic* semiconductor package, the method comprising:
>
> providing an integrated circuit (IC) wafer having one or more IC contact pads, the IC contact pads being connected to an IC on the IC wafer;
>
> providing an intermediate wafer having one or more intermediate contact pads, the intermediate contact pads being connected to an electro-*optic* arrangement on the intermediate wafer; and
>
> direct copper bonding the IC contact pads to adjacent intermediate contact pads, the electro-*optic* semiconductor package resulting. (emphasis added)

Applicants assert that fan does not describe a method in which an electro-*optic* semiconductor package results as claimed. The Examiner acknowledges Fan's failure to teach an electro-optic semiconductor packages and relies upon ordinary skill in the art to cure the deficiencies of Fan. Applicants point out, however, that there is no motivation to modify Fan to arrive at the claimed electro-optic semiconductor package because Fan is limited to the *electrical* advantages associated with direct copper bonding. The claimed approach, however, enables *optical* losses normally associated with electro-optic semiconductor packages to be minimized (See Specification para. 21, lines 8-12). Since Fan deals only with electrical structures and the electrical advantages associated with direct copper bonding, the art can support no implicit

motivation to modify Fan to include optics. There must be an express suggestion to combine optics with direct copper bonding before a hypothetical worker would do so.

Furthermore, Applicants seasonably challenge the Examiner's reliance on "ordinary skill" and request further evidence supporting this assertion. If the Examiner is taking Official Notice, Applicants request citation of references for all claimed features missing in Fan and motivation for combining any such features with Fan.

For at least the above reasons, claim 1 is patentable over Fan. Claims 2-4 and 14-16 depend from claim 1, and therefore also recite patentable subject matter. Accordingly, Applicants request that the Examiner withdraw the instant rejection.

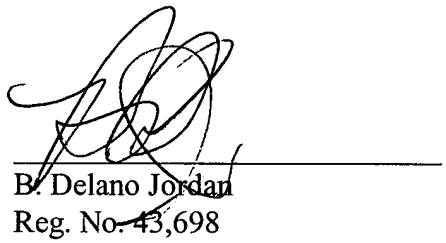
CONCLUSIONS

Applicants submit that all pending claims are in condition for allowance. Accordingly, Applicants respectfully request the Examiner to pass this case to issue at the Examiner's earliest possible convenience.

Although no fees are believed to be due, the Commissioner is hereby authorized to charge Kenyon & Kenyon Deposit Account No. 11-0600 for any applicable fee.

Should the Examiner require any additional information regarding this Response, the Examiner is invited to contact the undersigned at (202) 220-4275.

Respectfully submitted,



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